

Claims

1. Screw connection element having an outer threaded portion (6) and a sealing means (9, 19) which is disposed in the threads (8) thereof, characterised in that it is provided with a protective covering (10, 18) which surrounds the outer threaded portion (6), is produced from a flexible material and is intended for retaining the sealing means (9, 19) in the threads (8).
2. Screw connection element according to claim 1, characterised in that the protective covering (10) is applied on the outer threaded portion (6) by an immersion or spraying process.
3. Screw connection element according to claim 1, characterised in that the protective covering (10) comprises a sheath which is produced by deep-drawing and screwed onto the outer threaded portion (6).
4. Screw connection element according to claim 2 or 3, characterised in that the protective covering (10) is provided on its rear side with a mounting flange (10a, 22c).
5. Screw connection element according to claim 4, characterised in that the mounting flange (10a, 22c) abuts on a shoulder (11) which is provided on the rear end of the outer threaded portion (6) and can be connected to said shoulder.
6. Screw connection element according to claim 5, characterised in that the mounting flange (10a, 22c) can be bonded to the shoulder (11) by gluing.

7. Screw connection element according to one of the claims 3 to 6, characterised in that a thread (8a) situated at the front end of the outer threaded portion (6) is free of sealing means (9) and the protective covering (10) is connected in a form-fitting manner to this thread (8a) in the axial direction of the outer threaded portion (6).
8. Screw connection element according to claim 7, characterised in that the form-fitting connection is produced by shrinkage or compression.
9. Screw connection element according to one of the claims 1 to 8, characterised in that the sealing means (9) abuts directly on the threads (8) of the outer threaded portion (6) and the protective covering (10) has an inner diameter which corresponds essentially to the outer diameter of the outer threaded portion (6).
10. Screw connection element according to one of the claims 1 to 9, characterised in that the protective covering (18) contains an inner part (20) with an inner wall (22) which is adapted to the outer threaded portion (6) and an outer part (21) which surrounds the inner part, the sealing means (19) being disposed between the inner and the outer part (20 to 21).
11. Screw connection element according to claim 10, characterised in that the inner and the outer part (20, 21) can be connected to each other securely.
12. Screw connection element according to claim 10 or 11, characterised in that the inner and the outer part (20, 21) can be connected to each other in a form-fit at their front ends in the axial direction.

13. Screw connection element according to claim 11 or 12, characterised in that the inner part and the outer part (20, 21) are provided at their rear ends with mounting flanges (21a, 22c) which are intended for mutual connection.
14. Screw connection element according to one of the claims 1 to 13, characterised in that the sealing means (9, 19) is formed from a long fibrous or a thread-shaped material.
15. Protective covering for a screw connection element (1, 25) which is provided with an outer threaded portion (6) which is intended for receiving a sealing means (9, 19), comprising a sheath which is intended for screwing onto the outer threaded portion (6).
16. Protective covering according to claim 15, characterised in that it has an inner diameter which corresponds essentially to the outer diameter of the outer threaded portion (6).
17. Protective covering according to claim 15 or 16, characterised in that it contains an inner part (20) with an inner wall (22) which is adapted to the outer threaded portion (6) and an outer part (21) which surrounds the inner part (20) and is provided with a sealing means (19) between the inner and outer part (20, 21).
18. Protective covering according to claim 17, characterised in that the inner and the outer part (20, 21) can be connected to each other securely.
19. Protective covering according to one of the claims 15 to 18, characterised in that the inner and the outer part (20, 21) are connected to each other in a form-fit at their front ends in the axial direction.

20. Protective covering according to one of the claims 15 to 19, characterised in that the inner part and the outer part (20, 21) are provided at their rear ends with mounting flanges (21a, 22c) which are intended for mutual connection.
21. Protective covering according to one of the claims 15 to 20, characterised in that the sealing means (9, 19) is formed from a long fibrous or a thread-shaped material.
22. Screw connection element or protective covering according to one of the claims 1 to 21, characterised in that the sealing means (9, 19) comprises hemp fibres.
23. Screw connection element or protective covering according to claim 22, characterised in that the inner and/or the outer part (20, 21) is formed from a composite material.
24. Screw connection element or protective covering according to one of the claims 15 to 23, characterised in that the inner and/or the outer part (20, 21) contains protein-containing fibres.
25. Screw connection element or protective covering according to one of the claims 15 to 23, characterised in that the inner and/or the outer part (20, 21) contains cellulose.
26. Screw connection element or protective covering according to one of the claims 15 to 23, characterised in that the inner and/or the outer part (20, 21) contains mineral components.
27. Screw connection element or protective covering according to one of the claims 15 to 22, characterised in that the inner and/or the outer part (20, 21) contains respectively at least one polymer.

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28. Screw connection element or protective covering according to one of the claims 1 to 27, characterised in that the sealing means (9, 19) is enriched with a material which restricts the growth of germs and/or bacteria and/or destroys these.
29. Screw connection element or protective covering according to claim 28, characterised in that the material is present in wire or powder form.
30. Screw connection element or protective covering according to claim 28 or 29, characterised in that the material comprises a heavy metal.
31. Screw connection element or protective covering according to claim 30, characterised in that the material is copper.